



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,902	11/12/2003	John Warren Maly	200207608-1	9445
22879 7590 05/29/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
MERANT, GUERRIER				
ART UNIT		PAPER NUMBER		
2117				
NOTIFICATION DATE		DELIVERY MODE		
05/29/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM

mkraft@hp.com

ipa.mail@hp.com

Office Action Summary

Application No.

10/712,902

Applicant(s)

MALY ET AL.

Examiner

Guerrier Merant

Art Unit

2117

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03/14/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Appeal Brief filed on 03/14/08, PROSECUTION IS HEREBY REOPENED. The new grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

/JACQUES H LOUIS-JACQUES/

Supervisory Patent Examiner, Art Unit 2117

2. Claims 1-4, and 6- 22 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4 and 6-22 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Gupte et al (US. 5,903,475) and further in view of Giedd et al (US 3,614,606).

As per claims 1-3, Gupte et al teaches a computer implemented method of verifying events generated by an agent, said method comprising:

detecting an input signal at an input of said agent (*e.g. fig. 2-9, col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10*);

generating an expected output signal based at least in part on said input signal and detecting an output signal at an output of said agent, wherein said output signal is a translation of said input signal generated by said agent (*e.g. col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10*);

comparing said output signal with said expected output signal to verify whether said agent produced said output signal correctly based on said input signal (*e.g. col. 6, lines 53-61*).

Not explicitly teaching by Gupte et al is signaling an error if said agent or device did not produce said output signal correctly. However, Giedd et al teaches a computer implemented comprising comparing an agent output signal with an expected output signal to verify whether said agent produced said output signal correctly based on said input signal and signaling an error if said agent or device did not produce said output signal correctly (*e.g. abstract*). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the method of

Gupte et al with the one taught by Giedd et al in order to identify a user the status of the agent being tested.

As per claims 4, 6, 8, 11 and 22: Gupte et al teaches an apparatus for producing expectations to verify events or signals generated by an agent or device comprising: at least one computer readable medium and computer readable program code stored on said at least one computer readable medium, said computer readable program code comprising:

program code for monitoring, detecting at least one input of said agent for a stimulus (e.g. *fig. 2-9, col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10*);

program code for generating an expectation of an event or output, based at least in part on said input, wherein said event or output is expected to be generated by said agent as a result of said stimulus (e.g. *col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10*);

program code for monitoring, detecting at least one output of said agent for said event (e.g. *col. 6, lines 53-61*).

Not explicitly teaching by Gupte et al is signaling an error if said agent or device did not produce said output signal correctly. However, Giedd et al teaches a computer implemented comprising comparing an agent output signal with an expected output signal to verify whether said agent produced said output signal correctly based on said input signal and signaling an error if said agent or device did not produce said output

signal correctly (e.g. abstract). Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to implement the method of Gupte et al with the one taught by Giedd et al in order to identify a user the status of the agent being tested.

Claim 7: Gupte et al and Giedd et al teach an apparatus as in claim 4 above, wherein said program code for monitoring said at least one input of said agent for said stimulus comprises program code for monitoring at least one input of a memory agent for said stimulus (e.g. fig. 2-9, col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10), said stimulus being selected from a group consisting of an initial request to perform a memory operation, a snoop response, and a read response (e.g. col. 15, lines 3-24- Gupte et al).

Claims 9 and 10: Gupte et al and Giedd et al teach an apparatus as in claim 8 above, wherein said correlative information comprises transaction identification (e.g. col. 11, lines 49-62- Gupte et al).

Claim 12: Gupte et al and Giedd et al teach an apparatus as in claim 11 above, wherein said program code for gathering said stimulus from said plurality of separately transmitted portions comprises program code for establishing a watch list, said watch list containing an entry for each stimulus for which said separately transmitted portions are being awaited (e.g. col. 14, lines 20-40), and wherein said program code for

Art Unit: 2112

monitoring said at least one input of said agent for said stimulus comprises: program code for detecting one of said separately transmitted portions at said at least one input; program code for searching said watch list for said stimulus for which said one of said separately transmitted portions was being awaited and program code for adding said one of said separately transmitted portions to said stimulus (e.g. col. 17, lines 53-67- Gupte et al).

Claim 13: Gupte et al and Giedd et al teach an apparatus as in claim 4 above, wherein said program code for producing said expectation of said event comprises program code for creating a transaction record to contain information relating to a memory transaction involving said agent (e.g. col. 15, lines 35-50).

Claim 14: Gupte et al and Giedd et al teach an apparatus as in claim 13 above, wherein said program code for producing said expectation of said event further comprises: program code for creating an expectation record to contain information relating to an expected event from said agent; and program code for associating said expectation record with said transaction record (e.g. col. 18, lines 1-13- Gupte et al).

Claim 15: Gupte et al and Giedd et al teach an apparatus as in claim 4 above, wherein said program code for producing said expectation of said event comprises program code for storing expected data associated with said expectation (e.g. col. 18, lines 1-13), said expected data being received in a plurality of separate incoming

transmissions in said stimulus, said expected data being expected to be transmitted by said agent in a plurality of separate outgoing transmissions in said event (e.g. col. 18, lines 19-39).

Claim 16: Gupte et al and Giedd et al teach an apparatus as in claim 15 above, further comprising: program code for comparing said expected data with actual data in said event (e.g. col. 6, lines 53-61- Gupte); program code for signaling an error if said expected data does not match said actual data and program code for signaling an error if said actual data is not expected (e.g. Abstract- Giedd et al).

Claim 17: Gupte et al and Giedd et al teach an apparatus as in claim 15 above, further comprising program code for signaling an error if any of said plurality of separate outgoing transmissions is detected before all of said plurality of separate incoming transmissions have been received (e.g. Abstract- Giedd et al).

Claims 18-21: Gupte et al and Giedd et al teach an apparatus as in claim 15 above, wherein said program code for monitoring said at least one output of said agent for said event begins monitoring said at least one output for said plurality of separate outgoing transmissions as soon as a first of said plurality of separate incoming transmissions has been received (*e.g. fig. 2-9, col. 6, lines 41-64; col. 7, lines 20-35; col. 8, lines 56-67; col. 9, lines 1-57; col. 10, lines 5-10*).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Exr. Merant Guerrier whose telephone number is (571) 270-1066. The examiner can normally be reached Monday through Thursday from 10:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques, can be reached on (571) 272-6962. Draft or Informal faxes, which will not be entered in the application, may be submitted directly to the examiner at (571) 270-2066.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JACQUES H LOUIS-JACQUES/

Supervisory Patent Examiner, Art Unit 2117